Work Order ID 116542

April-17-14 7:56:44 AM

116542

Item ID: D4920-1 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID:

Item Name: End Fitting **Stop** *NS2*

Start Date: 4/17/14 **Start Qty:** 4.00 *4*

Required Date: 5/02/14 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Approvals: **Process Plan:** MLS **Date:** 4-04-17 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr D4920	**Revision Nbr** Rev A								
100		0.00							
100						CL	14/07/17	4	
Outsource5	**Memo**	0.00							
Outsource process - Machining	ISSUE P/O: 23860 POSSIBLE SUPPLIER:ATG C OF C IS REQUIRED								
110	QC6- Inspect dimensions to drawing	0.00				4			
110									
QC	**Memo**	0.00	DAS P7 9-89						
Quality Control			14/6/17						
150		0.00							
150	PURCHASING					CL	14/06/17		
Purchasing	**Memo**	0.00							
Purchasing	Issue P/O: _____ LPI Per ASTM 1417 LEVEL 2 Certificate of conformaty is required	N/A done @ ATG							

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Item ID: D4920-1 **Accept** *N9000040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: End Fitting

Start Date: 4/17/14 **Start Qty:** 4.00 *4*
Required Date: 5/02/14 **Req'd Qty:** 4.00 *4*
Reference:

Cust Item ID:
Customer:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Receive & Inspect for Damage & Mat'l Certs	0.00				4X		8014-6-27	
160									
Packaging	**Memo**	0.00							
Packaging	Ensure certificate of conformity is attached					4X		14-7-1	DAS 26 9-89
190	QC21- Final Inspection - Work Order Release	0.00				MLJ		14-07-02	
190									
QC	**Memo**	0.00							
Quality Control									

14-7-01

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

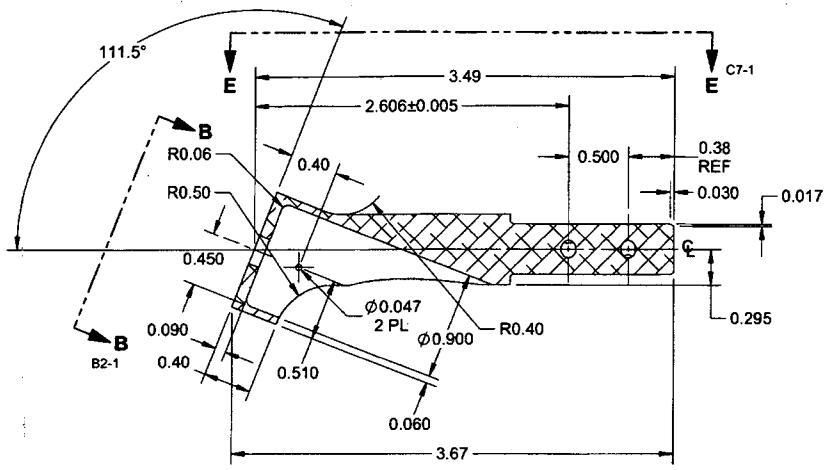
FAULT CATEGORY

Landing Gear

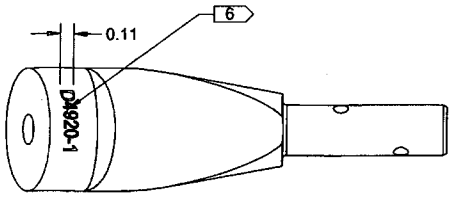
- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

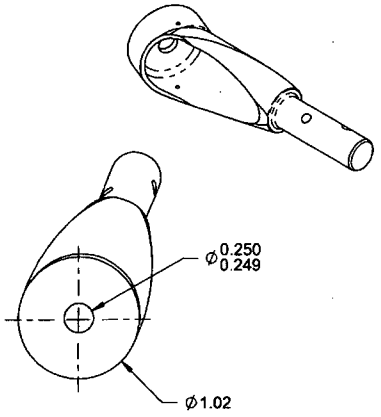
- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function
- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other



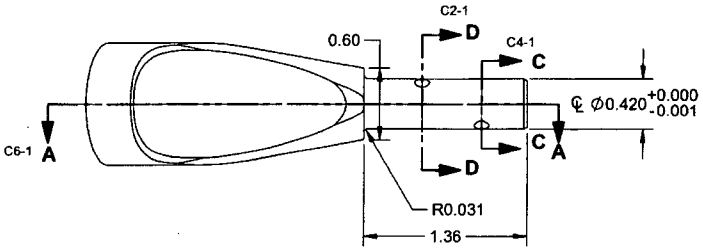
SECTION A-A B5-1

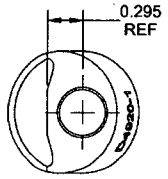


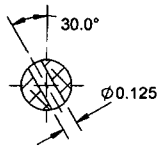
AUXILIARY VIEW E-E C7-1



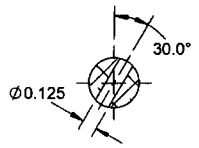
AUXILIARY VIEW B-B C7-1







SECTION C-C C5-1



SECTION D-D C5-1

D4920-1 END FITTING

NOTES:
1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION
PER AMS 5643/ASTM A564
DART SPEC M17-4-R
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3.
ENGRAVE P/N USING 0.11 HIGH LETTERS TO A MAX. DEPTH OF 0.010
7) WEIGHT: 0.21 lbs
8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	RF	13.09.16

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	
CHECKED	HS	DRAWING NO. D4920 REV. A
MFG. APPR.	JLM	SHEET 1 OF 2
APPROVED	HS	TITLE END FITTING SCALE NTS
DE APPR.	DS	
DATE	13.12.15	

APPROVED 1/04/17

116542 MLS

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

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- Scrap ☐
- Use-as-is ☐
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- Large Fab ☐
- Crosstube ☐
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- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
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Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
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- ☐ Cut Too Short
- ☐ Drawing
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- ☐ Out of Calibration
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- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
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- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO23860

Purchase Order Date 4/17/2014
PO Print Date 4/22/2014

Order From : VC-ATG001

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 613-446-4544

Ship To Contact
Ship To Phone
Ship Via: VENDOR'S TRUCK
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA – (Free Carrier)

Line Total: **$580.00**

9	D4871-1P	End Fitting	5/19/2014 Yes 5/19/2014	FN	8.00 Each	V 2014/6/5	$145.00	$1,160.00

MACHINE AS PER DWG D4871 REV. A
B116540
MATERIAL: 174PH-H900R1.500 M127334

Line Total: **$1,160.00**

10	D4920-1P	End Fitting	5/19/2014 Yes 5/19/2014	FN	4.00 Each	✓ 2014-6-27	$145.00	$580.00

MACHINE AS PER DWG D4920 REV. A
B116542
MATERIAL: 174PH-H900R1.500 M128809

Line Total: **$580.0**

Note:

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE STREET
ROCKLAND, ON K4K 1T2
Canada

Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 908161 Date: 24-Jun-14

To

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613 632-9577 Fax: 613 632-1053

Ship To

CHANTAL LAVOIE
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613 632-9577 Fax: 613 632-1053

Terms	Ship Via

Quantity	Description		
	PLEASE REFERENCE THE PACK LIST NUMBER ON ALL CORRESPONDENCE TO THIS SHIPMENT. IF YOU HAVE ANY QUESTIONS, PLEASE CALL AT (613) 446-4544.		
2 ea	Part: D4806-1P CLEVIS Job: 16212	PO: PO23860	Rev: A Line: 1
4 ea	Part: D4920-1P END FITTING Job: 16221	PO: PO23860	Rev: A Line: 10 8014-6-27
4 ea	Part: D4920-3P END FITTING Job: 16222	PO: PO23860	Rev: A Line: 11
4 ea	Part: D4884-3P END FITTING, EYE Job: 16225	PO: PO23860	Rev: A Line: 15
	DATE : 24 June 2014 CERTIFIED SIGNATURE: JAyotte RECEIVER SIGNATURE : _____ CERTIFICATE OF CONFORMANCE A.T.G. INDUSTRIES INC. CERTIFIES THAT ALL ITEMS IN THIS SHIPMENT ARE IN CONFORMANCE WITH THE REQUIREMENTS, SPECIFICATIONS, AND DRAWINGS REFERENCED IN THE ABOVE PURCHASE ORDER. I.S.O. 9001 : 2008 REGISTERED / MADE IN CANADA		

First Article Inspection Report

ATG INDUSTRIES INC.

731 Industrielle St
Rockland, Ontario K4K 1T2
Ph: 613 446-4544

Customer:	Dart Aerospace	Date:	June 13th, 2014	507
Part Number:	D4920-1P	Revision:	A	
PO Number:	PO23860	Qty:	4	FAI No.

Item	Dimension	Measurement Inspected by: Rene Tougas, Q.C.	Remarks
1	3.49	3.485	Section A-A
2	2.606±.005	2.604	
3	.400	.400	
4	.500	.499	
5	.38 REF	.382	
6	.030	.032	
7	.017	.015	
8	.295	.296	
9	3.67	3.670	
10	R.40	.400	
11	Ø.900	.901	
12	.060	.057	
13	Ø.047	.050	2 Places
14	.510	.513	
15	.40	.401	
16	.090	.089	
17	.450	.456	
18	R.50	.500	
19	R.06	.031	
20	111.5º	111.5º	
21	.11	.115	Auxiliary View E-E
22	Note 6	✓	
23	Ø.250/.249	.2497	Auxiliary View B-B
24	Ø1.02	1.020	
25	.60	.601	
26	Ø.420+.000/-.001	.4995	
27	1.36	1.3595	
28	R.031	.031	
29	.295 REF	.296	
30	30º	30º	Section C-C
31	Ø.125	.125	

First Article Inspection Report

ATG INDUSTRIES INC.

731 Industrielle St
Rockland, Ontario K4K 1T2
Ph: 613 446-4544

Customer:	**Dart Aerospace**	Date:	**June 13th, 2014**	**507**
Part Number:	**D4920-1P**	Revision:	**A**	
PO Number:	**PO23860**	Qty:	**4**	FAI No.

Item	Dimension	Measurement Inspected by: Rene Tougas, Q.C.	Remarks
32	30º	30º	Section D-D
33	Ø.125	.125	
34	Material:	17-4SS H900 1.375" RD BAR	Supplied by Customer
35	Treatment:	Liquid Penetrant	PO#: 201420237